

Amendments to the Claims:

Kindly rewrite claims 19-28 and 30-38 so that a complete set of the pending claims will read as follows (this listing of claims will replace all prior versions, and listings, of claims in the application):

Listing of Claims:

Claims 1-18 (previously canceled)

Claim 19 (currently amended): Apparatus for collecting and converting radiant energy comprising:

a plurality of spaced apart, incorporated in at least one array ~~elongated reflective~~ linear mirrored surfaces having generally concave transversal profiles, front longitudinal ends and opposing rear longitudinal ends being generally inclined toward one another;

at least a substantial part of said ~~reflective~~ mirrored surfaces being designed and positioned to reflect incident radiant energy that impinges upon said ~~reflective~~ mirrored surfaces from the side of said front longitudinal ends into a plurality of convergent beams and direct said plurality of said convergent beams by means of a single specular reflection to a plurality of preselected converging directions through spaces between adjacent pairs of said rear longitudinal ends.

Claim 20 (currently amended): The apparatus of claim 19 further comprising an elongated energy receiving means disposed in energy receiving relation to each of said ~~reflective~~ mirrored surfaces so that said convergent energy beams reflected from two or more adjacent ~~reflective~~ mirrored surfaces at least partially superimpose on one another on said energy receiving means.

Claim 21 (currently amended): The apparatus of claim 20 wherein said energy receiving means is positioned according to a relation: $\beta < 90^\circ$ where β is an angle between the direction to the source of said radiant energy and direction to a point at said ~~reflective~~ mirrored surfaces taken at a point of the energy receiving surface of said energy receiving means.

Claim 22 (currently amended): The apparatus of claim 20 wherein said energy receiving means comprises at least one photovoltaic cell having working area facing toward said ~~reflective~~ mirrored surfaces and the source of said radiant energy.

Claim 23 (previously presented): The apparatus of claim 22 further comprising at least one heat sink which is in heat exchange relation with said photovoltaic cell.

Claim 24 (previously presented): The apparatus of claim 20 wherein said energy receiving means comprises at least one fluid-carrying tube of a solar heat collector.

Claim 25 (currently amended): The apparatus of claim 20 wherein said energy receiving means is mechanically separated from said plurality of said ~~reflective~~ mirrored surfaces.

Claim 26: canceled

Claim 27 (currently amended): The apparatus of claim 19 wherein the slopes of all said ~~reflective~~ mirrored surfaces are defined so that angles of incidence α of said radiant energy on said ~~reflective~~ mirrored surfaces have particular values more than 45° and less than 90°.

Claim 28 (currently amended): The apparatus of claim 19 wherein one or more said ~~reflective~~ mirrored surfaces is disposed in any one of a translated, a reversed and/or a rotated orientation relatively to the others having the same basic arrangement.

Claim 29 (previously canceled)

Claim 30 (currently amended): The apparatus of claim 19 wherein said ~~reflective~~ mirrored surfaces are designed and positioned to minimize screening and shadowing on other ~~reflective~~ mirrored surfaces, wherein the front end of an inner ~~reflective~~ mirrored surface and the rear end of an adjacent outer ~~reflective~~ mirrored surface are aligned relatively to each other with respect to the incident flux and the rear end of said inner ~~reflective~~ mirrored

surface is disposed out of the path of energy rays reflected from the front end of said outer surface.

Claim 31 (previously presented): The apparatus of claim 19 wherein at least one of said transversal profiles is a segment of conical section curve.

Claim 32 (previously presented): The apparatus of claim 31 wherein said segment is parabolic.

Claim 33 (previously presented): The apparatus of claim 31 wherein said segment is circular.

Claim 34 (previously presented): The apparatus of claim 19 wherein the shape of at least one of said transversal profiles is represented by a function selected from the group consisting of a polynomial function of at least second order, a parametric curve, and a spline tailored to provide a desired irradiance distribution on said energy receiving means.

Claim 35 (previously presented): The apparatus of claim 19 wherein at least one of said transversal profiles comprises a set of conjugated lines selected from the group consisting of straight, parabolic, circular, elliptical, and hyperbolic segments.

Claim 36 (currently amended): The apparatus of claim 19 further comprising at least one axle support means for positioning said at least one array of said ~~reflective~~ mirrored surfaces according to the movement of source of said radiant energy.

Claim 37 (currently amended): The apparatus of claim 19 further comprising support means supporting said plurality of said ~~reflective~~ mirrored surfaces and arranged so that said ~~reflective~~ mirrored surfaces can be individually adjusted by rotating around their respective longitudinal axes and/or moving relatively to one another.

Claim 38 (currently amended): The apparatus of claim 20 wherein said ~~reflective~~ mirrored surfaces are arranged in two or more arrays that can be individually tilted, rotated, and positioned differently relatively to each other and said energy receiving means.

Claim 39 (new): The apparatus of claim 19 wherein at least one of the linear mirrored surfaces comprises a composite of linear planar reflectors extending parallel to said mirrored surfaces and having the same basic orientation thereby forming said generally concave transversal profile.